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EXAMINER

HA, YVONNE QUY M

ART UNIT

PAPER NUMBER

2664

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/639,935

Applicant(s)

FRASER ET AL.

Examiner

Yvonne Q. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1--29 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: references A, B in figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: all references on figures 3 and 4 are not described. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 1, 23, 24, 25, 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "replacing the" is incomplete.

Double Patenting

4. Claims 10-12 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 7-9. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

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one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-12, 13-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Muller et al. (US Patent 6,650,640).

Referring to claim 1, Muller discloses a method for identifying a flow (col. 4, lines 33-42, figure 1a), including: receiving a request from a host for a flow identifier (col. 4, lines 45-67); sending a flow identifier to the host (col. 5, lines 1-9); and receiving a packet with the flow identifier as the address (col. 5, lines 5-9).

Referring to claim 2, Muller discloses all aspects of the claimed invention and further teaches the address is a source address (col. 8, lines 50-63).

Referring to claim 3, Muller discloses all aspects of the claimed invention and further teaches the address is a destination address (col. 8, lines 50-63).

Referring to claim 4, Muller discloses all aspects of the claimed invention and further teaches the flow identifier is an address of a virtual host (col. 9, lines 1-5).

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Referring to claim 5, Muller discloses all aspects of the claimed invention and further teaches the destination address of the packet is the address of a virtual host (col. 7, lines 31-45, i.e. computer host).

Referring to claim 6, Muller discloses all aspects of the claimed invention and further teaches the source address of the packet is the address of a virtual host (col. 7, lines 31-45, i.e. computer host).

Referring to claims 7 and 12, Muller discloses all aspects of the claimed invention and further teaches the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet header has an Ethernet source address and an Ethernet destination address, and wherein the flow identifier is a the Ethernet source address (col. 8, lines 50-67; col. 9, lines 1-41).

Referring to claims 8 and 10, Muller discloses all aspects of the claimed invention and further teaches the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet header has an Ethernet source address and an Ethernet destination address, and wherein the Ethernet source address is the address of a real host (col. 8, lines 50-67; col. 9, lines 1-41, 56-65).

Referring to claims 9 and 11, Muller discloses all aspects of the claimed invention and further teaches the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet header has an Ethernet source address and an Ethernet destination address, and wherein the Ethernet source address is the address of a virtual host (col. 8, lines 50-67; col. 9, lines 1-41, 56-65).

Referring to claim 13, Muller discloses all aspects of the claimed invention and further teaches the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet

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header has an Ethernet source address and an Ethernet destination address, and wherein the Ethernet destination address is a first host address (col. 8, lines 50-67; col. 9, lines 1-41, 56-65).

Referring to claim 14, Muller discloses all aspects of the claimed invention and further teaches the Ethernet payload has an Internet Protocol header and an Internet Protocol payload, wherein the Internet Protocol header has an Internet Protocol source address and an Internet Protocol destination address, and further including: determining a second host address based upon the Internet Protocol destination address in the Internet Protocol header; and storing the second host address correlated with the first host address in a packet forwarding table (col. 10, lines 58-67, col. 11, lines 1-37; figure 2).

Referring to claim 15, Muller discloses all aspects of the claimed invention and further teaches the first host address is the address of a real host, and the second host address is a virtual host address (col. 13, lines 33-51, different headers represent different protocol which means different addresses; figure 2).

Referring to claim 16, Muller discloses all aspects of the claimed invention and further teaches the first host address is a virtual host address, and the second host address is the address of a real host (col. 13, lines 33-51, different headers represent different protocol which means different addresses; figure 2).

Referring to claim 17, Muller discloses all aspects of the claimed invention and further teaches changing the Ethernet source address of the packet to be equal to the first host address; changing the Ethernet destination address of the packet to be equal to the second host address; and sending the packet (col. 7, lines 31-45, i.e. computer host; col. 13, lines 33-51, different headers represent different protocol which means different addresses; figure 2).

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Referring to claims 18 and 20, Muller discloses all aspects of the claimed invention and further teaches the Ethernet payload has an Internet Protocol header and an Internet Protocol payload, wherein the Internet Protocol header has an Internet Protocol source address and an Internet Protocol destination address, and further including: determining a second host address from a packet forwarding table (col. 10, lines 58-67, col. 11, lines 1-37; figure 2); changing the Ethernet source address of the packet to the first host address; changing the Ethernet destination address of the packet to the second host address; and sending the packet (col. 15, lines 13-32, concatenating process of addresses corresponding to entities).

Referring to claim 19, Muller discloses all aspects of the claimed invention and further teaches an incoming packet that has a first host address as its destination address arrives at a port having a first port identifier, and wherein a packet forwarding table correlates the first host address with a second port identifier (figure 1a, reference 110); and further including rejecting the packet if the first port identifier is not equal to the second port identifier (col. 15, lines 13-32, concatenating process of addresses corresponding to entities; col. 17, lines 24-34).

Referring to claim 21, Muller discloses all aspects of the claimed invention and further teaches a forwarding host address is the address of a real host (col. 16, lines 59-67, col. 17, lines 1-6, i.e. computer host).

Referring to claim 22, Muller discloses all aspects of the claimed invention and further teaches a forwarding host address is a virtual host address (col. 16, lines 59-67, col. 17, lines 1-6, i.e. computer host).

Referring to claim 23, Muller discloses a method for handling flows (col. 15, lines 13-15), including: adding a virtual circuit flag to a packet (col. 15, lines 52-67; col. 16, lines 1-11);

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and setting the value of the virtual circuit flag to indicate when the packet belongs to a flow and requests that the flow recognized by the network (col. 16, lines 1-11, 21-46).

Referring to claim 24, Muller discloses all aspects of the claimed invention and further teaches determining if the virtual circuit flag indicates a flow; and if the virtual circuit flag indicates a flow, then replacing an address of the packet with a host address (col. 15, lines 14-20).

Referring to claim 25, Muller discloses all aspects of the claimed invention and further teaches the source address of the packet is replaced with a host address (col. 18, lines 31-55).

Referring to claim 26, Muller discloses all aspects of the claimed invention and further teaches the destination address of the packet is replaced with a host address (col. 18, lines 31-55).

Referring to claim 27, Muller discloses all aspects of the claimed invention and further teaches the host address is the address of a real host (col. 16, lines 59-67; col. 17, lines 1-6, i.e. computer host).

Referring to claim 28, Muller discloses all aspects of the claimed invention and further teaches the host address is a virtual host address (col. 16, lines 59-67; col. 17, lines 1-6, i.e. computer host).

Referring to claim 29, Muller discloses a method for establishing a virtual circuit for a flow (col. 35, lines 42-52), including: forwarding a connection request datagram from a first host to a second host (col. 37, lines 20-24); forwarding accept message from the second host to the first host, wherein the accept message is flagged as a virtual circuit establishment signal (col. 37, lines 25-47); establishing a full duplex virtual circuit between the first host and the second host

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(col. 38, lines 25-52); forwarding a confirmation message from the first host to the second host over the virtual circuit (col. 39, lines 39-67, packet status).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Jorgensen (US Patent 6,452,915) discloses IP flow classification in a wireless PTMP transmission
- Dietz et al. (US Patent 6,665,725) discloses processing protocol specific information in packets specified by a protocol description language
- Yu (US Patent 5,734,865) discloses virtual LAN well-known port routing mechanism for mult-emulators in an open system environment

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ajit Patel can be reached on 703-308-5347. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH


Ajit Patel
Primary Examiner